On a small collection of Blattidae in the Naturhistorischen Museum zu Wiesbaden.

By

R. Shelford, M. A., F. L. S.

Mit Tafel I.

The collection of Blattidae which Herr Ed. Lampe of the Wiesbaden Museum has entrusted to me for determination includes a few species of considerable interest and a complete list of them is given herewith. The types of the new species are in the Wiesbaden Museum but duplicates of some species have been generously presented to the Oxford University Museum (Hope Department).

Fam. BLATTIDAE.

Subfam. Ectobiinae.

Genus Hemithyrsocera, Sauss.

Hemithyrsocera histrio, Burm.

1 of. Palembang, Sumatra (coll. A. Fuchs, 1902).

Subfam. Phyllodromiinae.

Genus Phyllodromia, Serv.

Phyllodromia germanica, I.

2 $\sigma\sigma$, Palembang, Sumatra (coll. A. Fuchs, 1902): 1 \circ , 1 larva. Iguazu, Argentine (coll. K. Seyd, 1907).

Phyllodromia contingens, Walk.

1 &, S. Atjeh, Sumatra (coll. A. Fuchs. 1902). Previously recorded from Sarawak, Borneo.

Phyllodromia hemerobina, Gerst.

1 Q. Bibundi, Cameroons (coll. J. Weiler and O. Rau, 1907).

Genus Ischnoptera, Burm.

Ischnoptera australis, Sauss.

One example with the abdomen missing, Australia (coll. Odern-heimer).

Genus Loboptera, Br.

Loboptera bergeri, sp. n.

Q. Piceous. Head castaneous, antennae fuscous. Lateral margins of pronotum with a hyaline fascia, failing to reach the posterior margin. Tegmina with outer margin hyaline: broader than long, with faint indications of the venation, the apex of the marginal area truncate, the apex of the discoidal area rounded. Metanotum with a large quadrate hyaline macula on each side of the middle line anteriorly. Dorsal abdominal tergites 3—7 each with a lateral hyaline spot, the spots on the 5th tergite minute, the 7th tergite with a pair of central spots also. Supra-anal lamina triangular, apex emarginate, its disc testaceo-hyaline. Cerci testaceous except at the base. A very sparse minute pubescence on the abdomen and coxae. Abdomen beneath castaneous, a lateral hyaline spot on sternites 2 and 3. Sub genital lamina semi-orbicular, ample. Legs testaceous, the bases of the coxae and tibiae, the apices of the femora and tibiae, castaneous. [Front legs missing.]

Total length 11 mm; tegmina 1,8 mm \times 2 mm; pronotum 3 mm \times 4 mm.

Rietmond, Gibeon, German S. W. Africa (coll. C. Berger). One specimen.

Distinguished by the form of the tegmina, which are intermediate in shape between the squamiform Loboptera-type and the quadrate Temnopteryx-type.

Genus Paraloboptera, Sauss.

Paraloboptera weileri, sp. n.

♂. Fusco-castaneous. Basal joints of antennae and the mouth-parts testaceous. Head rufo-castaneous. Pronotum laterally bordered with rufo-testaceous. Tegmina rufo-testaceous. Metanotum with a curved transverse testaceous band. Abdomen beneath with the disc rufous, laterally dark castaneous. Supra-anal lamina triangular. Sub-genital lamina asymmetrical, apex slightly produced, a pair of small styles. [Cerci mutilated] — Legs testaceous.

Total length 10 mm; length of tegmina 2 mm; pronotum 3 mm \times 4.1 mm.

Bibundi, Cameroons (coll. J. Weiler and O. Rau, 1907). One example.

Subfam. Epilamprinae.

Genus Phoraspis, Serv.

Phoraspis luteola, Blanch.

2 QQ. Sao Paulo, Brazil (P. Preiss, 1907).

From the apex of the abdomen of one example an egg-mass protrudes; the ova are in an andvanced stage of development and this species is evidently viviparous as are so many other, if not all, the Epilamprinae.

Genus Opisthoplatia, Br.

Opisthoplatia orientalis, Burm.

1 ♂, 1 ♀, Hongkong (coll. K. Seyd, 1908).

Genus Compsolampra, Sauss.

Compsolampra liturata, Serv.

1 Q, Kandy, Ceylon (coll. K. Seyd, 1908). Previously recorded from Java.

Genus Molytria, Stål.

Molytria badia, Br.

1 ♂, 1 ♀, S. Atjeh, Sumatra (coll. A. Fuchs, 1902). Previously rec rded from Borneo, Java and Singapore.

Genus Epilampra, Burm.

Epilampra erubescens, Gerst.

1 larva, Bibundi, Cameroons (coll. J. Weiler and O. Rau).

Genus Tribonoidea, nov.

Belongs to the section of Epilamprinae with long metatarsus, biseriately spined beneath and differs from the known genera in that section by the cucullate pronotum, more arcuate anteriorly than posteriorly and with slightly reflected margin. Tegmina and wings longer than

the abdomen. Mediastinal vein of tegmina laminate beneath. Supraanal lamina (7) bilobed. Femora sparsely armed. Tarsal arolia very small.

Tribonoidea seydi, sp. n.

o. Dark castaneous. Antennae rather short, first joint elongate. Eyes rather close together. Face and mouth parts testaceous. Pronotum reticulate-punctate, a pair of oblique impressions and a pair of smooth spaces defining a central area beneath which lies the head. Anteriorly the pronotum extends considerably beyond the head; near the posterior margin there is a short transverse carina and in the neighbourhood of this the pronotum is transversely striate; a median carina. Tegmina with mediastinal and anal fields reticulate, costals and discoidal sectors very ramose. Wings with mediastinal vein very long and irregularly ramose, costals irregular, ulnar vein multiramose. Supra-anal lamina bilobed exceeding the sub-genital lamina; styles minute, Cerci very short. Abdomen beneath and legs testaceous. Posterior margins of all the femora beneath unarmed; front femora with 3-4 spines, mid femora with 2 spines, hind femora with 3 spines, on the anterior margin beneath. Formula of apical spines $\frac{1}{1}$, $\frac{1}{0}$, $\frac{1}{0}$, genicular spines minute, none on front femora. Posterior metatarsus exceeding the remaining

joints in length; pulvilli moderate, spined.

Total length 30 mm; length of body 21,2 mm; length of tegmina 25 mm; pronotum $6.2 \text{ mm} \times 9.6 \text{ mm}$.

Oxapampa, Peru (coll. K. Seyd, 5. V. 07). One example.

The systematic position of this genus is somewhat uncertain. Superficially the insect closely resembles species of the genera Tribonidium and Zetobora but the tarsal structure excludes it from the sub-family Panchlorinae, The presence of tarsal arolia also excludes it from the Blaberinae with which sub-family it exhibits somes affinities -e. g. the sparse armature of the femora. I have therefore no option but to place it provisionally in the Epilamprinae.

Subfam. Blattinae.

Genus Polyzosteria, Burm.

Polyzosteria limbata, Burm.

1 8, Australia (coll. Odernheimer).

Genus Stylopyga, Fisch.-Waldh.

Stylopyga coxalis, Walk.

Several examples of both sexes, Stephansort, German New-Guinea (Bergmann, 1899 and A. Hofmann, 1904).

Stylopyga paralella, Bol.

1 ♂, 1 Q, Kandy, Ceylon (coll. K. Seyd, 1908).

Stylopyga furcifera, sp. n. (Taf. 1, Fig. 1 A-C.)

Total length $16-18\,\mathrm{mm}$; pronotum $4.5-4.8\,\mathrm{mm} > 6-6.2\,\mathrm{mm}$. Bibundi, Cameroons (coll. J. Weiler and O. Rau 1905—1907). Several examples.

Stylopyga assimilis, sp. n. (Taf. 1, Fig. 2 A-B.)

Total length 17—20 mm; pronotum 5—5,8 mm \times 6,1—7 mm. Bibundi, Cameroons (coll. J. Weiler and O. Rau VIII--IX 1907). Several examples.

Stylopyga nigerrima, sp. n. (Taf. 1, Fig. 3 A--C.)

♂ and Q. Similar to the preceding species, but smaller; palpi castaneous. Supra-anal lamina (♂) simply trigonal, (\bigcirc) trigonal, subcucullate, apex slightly emarginate. Sub-genital lamina with apex widely emarginate, posterior angles not spinous, styles very similar to those of S. assimilis. Total length 14—15 mm; pronotum 4—4,5 mm. \times 5—5,5 mm. Bibundi, Cameroons (coll. J. Weiler and O. Rau VIII—IX 1907).

The West African species of Stylopyga may be distinguished as follows:

- 1. Large, castaneous species. S. manca, Gerst. (Cameroons), (Taf. 3, Fig. 4)
- 1'. Smaller, piceous species,
- Supra-anal lamina (♂) produced to a point . . . S. anthracina, Gerst. (Cameroons),
- 2'. Supra-anal lamina (♂) not as above.
- 3. Styles not bifurcate. . . S. spinulifera, Krauss (San Thomé),
- 3'. Styles bifurcate,
- Supra-anallamina (♂ and ♀)
 without spinous angles.
 S. nigerrima, sp. n. (Cameroons),
- 4'. Supra-anal lamina (\mathcal{O} and \mathcal{O}) with spinous angles,
- 5. Sub-genital lamina (3) with apex cleft and tuberculate S. furcifera, sp. n. (Cameroons).
- 5'. Sub-genital lamina (8) with apex sinuate S. assimilis, sp. n. (Cameroons).

Periplaneta aethiopica, Sauss. is a species of Pseudoderopeltis and is not species of Stylopyga as recently suggested.

Genus **Periplaneta**, Burm.

Periplaneta americana, L.

2 ♂♂. 1 ♀, Bibundi, Cameroons (coll. J. Weiler and O. Rau) and Posadas, Argentine (coll. K. Seyd 1902).

Periplaneta australasiae, Fab.

Several examples from Bibundi, Cameroons (coll. J. Weiler and O. Rau 1907); Palembang, Sumatra (coll. A. Fuchs 1902); Java (coll. Fritze).

Periplaneta pallipalpis, Serv.

1 o, Ceylon (coll. Freudenberg).

Periplaneta funebris, Shelf.

1 ♀. Cameroons (coll. F. Fuchs 1907).

Genus Homalosilpha, Stål.

Homalosilpha ustulata, Burm.

1 larva, Kandy, Ceylon (coll. K. Seyd 1908).

Genus Pelmatosilpha, Dohrn.

Pelmatosilpha sinhalensis, sp. n.

A. Piceous. nitid. Ocelli and labial palpi testaceous; antennae, maxillary palpi and labrum castaneous. Eyes and antennal sockets equidistant. Pronotum without impressions, posteriorly truncate. Tegmina quadrate. extending to middle of second abdominal tergite, slightly scabrous, anal vein impressed, the other veins obsolete, outer angles rounded. Wings minute. coriaceous. Seventh abdominal tergite slightly produced in the middle. Supra-anal lamina sub-quadrate, posterior angles rounded, posterior border slightly emarginate, rufo-fimbriate. a central carina. Abdomen dark castaneous beneath, sub-genital lamina narrow, a pair of long slender styles. [Cerci missing]. Coxae and femora castaneous, femora strongly spined. Pulvilli large, covering the whole of the distal joints, posterior metatarsus biseriately spined beneath. Total length 20 mm; length of tegmina 6,1 mm; pronotum 7 >< 9.8 mm. Ceylon (coll. Freudenberg).

The relative distances apart of the eyes and antennal sockets is a most unreliable character on which to separate the New World genera of Blattidae with large pulvilli from the Old World genera; I hope to publish shortly a revision of the subfamily Blattinae in which it will be shown that the geographical boundaries of the genera Pelmatosilpha and Eurycotis must be considerably extended.

Subfam. Corydiinae.

Genus Polyphaga, Brullé.

Polyphaga sumatrensis, sp. n.

O. Pale testaceous. Frons and vertex castaneous; eyes and ocelli equally far apart. Pronotum barely covering vertex of head, rufo-fimbriate and pubescent, disc rather darker than margins. Tegmina with a few obscure fuscous maculae, mediastinal vein laminated beneath, anal vein rounded. Ulnar vein of wings not flexuose at base. Supraanal lamina narrow, apex slightly emarginate; sub-genital lamina slightly asymmetrical its margin thickened and fimbriate, styles minute. Posterior

metatarsus rather longer than remaining joints; calcar of posterior tibia equal to half the length of the metatarsus. Total length 21,5 mm; length of body 15 mm; length of tegmina 18,5 mm; pronotum 4 > 6 mm. Palembang, Sumatra (coll. A. Fuchs, 1902). One example.

It is surprising to find a species of this Palaearctic genus occurring in the tropics. The species is allied to P, sinensis Sauss, but is considerably smaller and paler in colour.

Genus Tivia, Wlk.

Tivia, Walker, Cat. Blatt. Brit. Mus. Suppl. p. 153 (1869). Hemilatindia, Saussure, Ann. Mus. Civ. Genova vol. XXXV p. 83 (1895).

I have examined the types of Tivia simulatrix, Wlk. and Hemilatindia doriana, Sauss, and there can be no doubt but that these two species are congeneric; Holocompsa fulva, Burm, also belongs to this genus. De Saussure is in error in describing the tibial spines of H, doriana as bi-seriately arranged, for I find that they are triseriately arranged: for the rest, de Saussure's description is accurate and serves to characterise the genus well enough. It should however be noted that Tivia (= Hemilatindia) can scarcely be considered as intermediate between Latindia and Euthyrrapha, for in all its characters it approximates Polyphaga so closely that it is not easy to find a really satisfactory feature to discriminate between the two genera. In T. simulatrix Wlk, and T. doriana Sauss, the tarsal arolia are absent, whereas they are present in T. fulva and the new species here described; in the sub-family Corydinae the presence or absence of tarsal arolia does not appear to be a character of much taxonomic importance, for it varies within the limits of certain genera e. g. Polyphaga, Latindia.

Tivia morosa, sp. n.

Tuscous, Head castaneous, antennae testaceous at base; eyes rather close together on vertex of head, from swollen, ocelli present and touching the eyes. Pronotum anteriorly strongly arcuate and covering the vertex of the head, posteriorly subtruncate, sides deflexed, anterior margin hyaline and rufo-fimbriate, remainder sparsely pubescent. Scutellum exposed. Tegmina considerably exceeding the apex of the abdomen, with some scattered hyaline spots, a distinct stigma in the middle of the marginal area, formed by the incrassation of the costal

veins; discoidal sectors flexuose, anal vein angulate. Wings with a large stigma in the middle of the marginal area, ulnar vein 6-ramose. Supra-anal lamina short, narrow; subgenital lamina with apex deeply cleft, a pair of slender styles. Cerci moderate, 10—11 jointed, the basal joint the largest. Front tibiae with 7 apical calcaria, hind tibia with 6; tibial spines in 3 rows. Tarsi with arolia. Total length 10,3 mm; length of body 8 mm: length of tegmina 8,2 mm; pronotum 2 > 2,8 mm.

Rietmond, Gibeon, German S. W. Africa (coll. C. Berger). Three males.

The species is most closely allied to T. fulva, Burm. as determined by Brunner.

Genus Homaeogamia, Burm.

Homaeogamia bolliana, Sauss.

1 of, S. Antonia, Texas (coll. F. Fuchs 1907).

Genus Paralatindia, Sauss.

Paralatindia obscura, sp. n.

Tegmina not extending beyond the 2nd abdominal tergite, ovate, veins obsolescent, mediastinal ramose, 4 costals, ulnar vein tri-ramose, anal vein impressed. Wings minute, coriaceous. Abdomen rufo-castaneous at base, remainder fuscous; supra-anal lamina sub-quadrate, its apex widely emarginate, sub-genital lamina semi-orbicular, a pair of slender testaceous styles. Cerci fuscous, acuminate. Front tibiae with one spine on anterior border and 4 apical spines, no spine on posterior border, mid- and hind-tibiae with a few spines on anterior border, biseriately arranged, 5 apical spines, hind-tibiae with no spines on posterior border, mid-tibiae with one. No tarsal arolia.

Total length 8 mm; length of tegmina 2,3 mm; pronotum 2,5 mm × 3,1 mm.

Vauli, 4000 mètres, Peru (coll K. Seyd, 13. V. 07). One example. Differs from the other species of the genus by the absence of tarsal arolia and by the pronotum without impressions.

Subfam. Panchlorinae.

Genus Gyna, Br.

Gyna capucina, Gerst.

6 ♂♂, 1♀. Bibundi, Cameroons (coll. J. Weiler and O. Rau, 1906, 1907).

Gyna gloriosa, Stål.

3 QQ, Bibundi, Cameroons (coll. J. Weiler and O. Rau, 1906, 1907).

Gyna oblonga, Borg.

1 07, Bibundi, Cameroons (coll. J. Weiler and O. Rau, 1907).

Genus Nauphoeta, Burm.

Nauphoeta cinerea, Oliv.

1 Q, Bibundi, Cameroons (coll. J. Weiler and O. Rau) The characteristic dark variety of West Africa.

Genus Oniscosoma, Br.

Oniscosoma granicollis, Br.

1 Q, 1 larva, Australia (coll. Odernheimer).

Subfam. Blaberinae.

Genus Blabera, Serv.

Blabera gigantea, L.

1 Q, Cayenne (coll. Gerning).

Blabera postica, Erichs.

 $1 \, \mathcal{Q}$, Java (coll. Fritze). There must either be some mistake in the locality label of this specimen, or else the specimen was accidentally imported into Java from South America.

Subfam. Perisphaeriinae.

Genus Derocalymma, Burm.

Derocalymma? silphoides. Bol.

1 young larva, Bibundi, Cameroons (coll. J. Weiler and O. Rau). have determined this species with considerable doubt.

Genus Cyrtotria, Stål.

Cyrtotria robusta, sp. n.

Q. Closely allied to C. gibbicollis Stål. but larger and stouter. Pronotum very similar but the disc rugose and with the posterior angles more strongly produced. Abdomen broadly ampliated. Legs castaneous, the tibiae darker than the femora.

Total length 15,8 mm; pronotum 4,9 mm × 6 mm.

Rietmond, German S. W. Africa (coll. C. Berger, 1903). One example.

Genus Isoniscus, Borg.

Isoniscus sjöstedti, Borg.

3 ♀♀, Bibundi, Cameroons (coll. J. Weiler and O. Rau, 1906). I consider that this genus is more naturally placed in this subfamily than in the Panchlorinae. It is somewhat remarkable that the male has not yet been found, though large collections have been made in the Cameroons.

Genus Dasyposoma, Br.

Dasyposoma nigra, Br.

1 ♂, 1 Q Iguazu. Argentine and Oxapampa, Peru (coll. K. Seyd, 1907).

Subfam. Panesthiinae.

Genus Salganea, Stål.

Salganea morio, Burm.

3 ♂♂, 2 ♀♀, Java (coll. Fritze).

Genus Panesthia, Serv.

Panesthia javanica, Serv.

1♂, 1♀, Java (coll. Fritze).

Panesthia australis, Br.

1 Q, 1 larva, Australia (coll. Odernheimer.

Panesthia plagiata, Walk.

2 ♀♀, Ceylon (coll. Freudenberg).

Panesthia kheili, Bol.

 $1 \, \mathcal{Q}$, Stephansort, German New Guinea (coll. A. Hoffmann, 1904). This is not typical as the tegmina are reduced to two lobes scarcely extending beyond the metanotum, but in all other details it agrees perfectly with Bolivar's description

I take this opportunity of describing two new species of Blattidae in the collection of the Zoological Museum of Berlin.

Periplaneta vosseleri, sp. n.

Castaneous. Head piceous, labrum testaceous; antennae longer than the body, castaneous. Pronotum castaneous; with a sparse erect pubescence, no impressions, greatest width behind the middle, posterior margin obtusely angled. Angles of meso- and metanotum without membranous processes. Tegmina barely exceeding apex of abdomen. Supra-anal lamina quadrate, angles rounded; sub-genital lamina produced, posterior margin very convex, styles slender, long. Cerci long, lanceolate. Femora strongly armed; tarsi of usual type.

Total length 18 mm; length of tegmina 14 mm; pronotum 5 mm × 6 mm.

Type in the Zoological Museum, Berlin.

Amani, German E. Africa (Vosseler).

Panchlora vosseleri, sp. n.

Q Closely allied to P. camerunensis, Borg but differing in the following details. — Eyes touching. A very narrow submarginal black line on either side of the pronotum, a pair of black points in the anterior part of the pronotum. Tegmina with the following black points, one at the base of the anal vein, one at the point of divergence of radial from mediastinal vein, one in the discoidal field below the 2nd branch of the posterior ulnar vein, one between 5th and 6th costal veins, one at apex of tegmen below the anterior ulnar vein; a short black line below the radial vein, close to its base. Supra-anal lamina bilobate, exceeding the sub-genital lamina. Abdomen and legs pale testaceous.

Total length 25 mm; length of body 22 mm; length of tegmina 24 mm; pronotum 6.2 mm imes 8.6 mm.

Amani, German E. Africa (Vosseler).

Type in Zoological Museum, Berlin; co-type in Oxford University Museum.

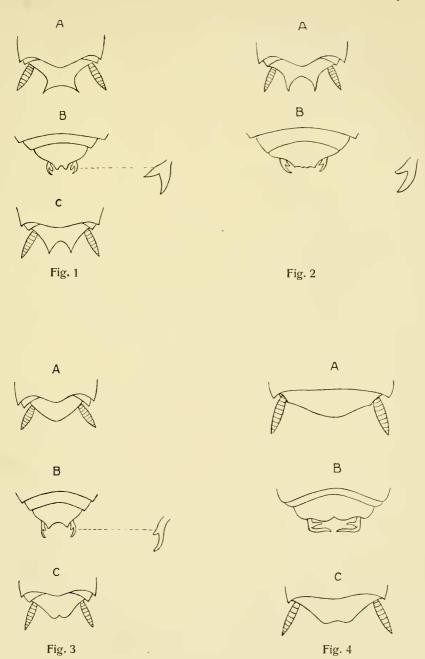


Fig. 1. Stylopyga furcifera sp. n.

Fig. 3. Stylopyga nigerrima sp. n.

 $A = supra-anal\ lamina,\ \circlearrowleft.$

Fig. 2. Stylopyga assimilis sp. n.

Fig. 4. Stylopyga manca, Gerst.

B = sub-genital lamina, σ .

 $C = supra-anal\ lamina\ \circ.$